

REMARKS

Claims 1-6 and 8-22 are currently active.

The Examiner has rejected Claims 1-13 as being anticipated by Kacyra, Kozah or Ohishi. Applicants respectfully traverse this rejection in view of the amendments to the claims. The applied art of record does not teach or suggest a scanning laser range finder that produces 125,000 discrete data points every second. This high density of points, is not simply a design choice, but is done for many reasons, including allowing the resulting reflectance measurements to be formatted using industry standard file formats. See page 10, lines 8-10 of the specification of the above-identified patent application.

The Examiner has rejected the claims under 35 U.S.C. 112.

The Examiner has taken the position that the amended claims and the new claims have new matter. Furthermore, applicants question to what extent the Examiner has even reviewed substantively the amended claims because the Examiner has given no weight to the amendments to the claims and the new claims. It is respectfully requested that the Examiner reconsider the finality status of the above-identified patent application after reviewing the comments below and supposedly review the claims after it is shown that there is no new matter that has been introduced.

The Examiner taken the position that Claims 14-22 have no support in the original file disclosure. Applicants respectfully, strongly traverse this statement. Applicants, in the last amendment, in the remarks section, point out the support for Claims 14-22 is found on page 26, line 24-page 28, line 19.

Referring to page 14, Claim 14, there is a first step of loading a reflectance image into an image window. The reflectance image 270 is found on page 26, line 27. The graphical interface 80 and the reflectance image 270 in the graphical image interface 80 is shown in figure 1.

The step of "selecting a first point of the structure in the image" is found on page 26, line 25, where the RDM 70 prompts the operator to solve the point of the structure.

The step of "selecting a second point on the structure" is supported on page 26, line 28, where it states the operator is prompted to pick another point and the reflectance image 270 of the structure.

The step of selecting a third point of the structure is supported on page 27, lines 3 and 4, where it states the operator is prompted for a final time to select a point in the reflectance image 274 of the structure.

The step of "extracting straight edges for the first point, second point and third point" is supported by page 27, lines 11 and 12, where it states, first, straight edges are extracted for each picked point.

The limitation of "constructing a plane so as to be perpendicular to an average of directions of a straight edges lines" is supported on page 27, line 17, where it states a plane is constructed so as to perpendicular to the average of directions of the straight edge lines.

The limitation of "intersecting the plane in turn with each of the lines to determine 3 control points" is found on page 28, line 7, where it states the plane is then intersected in turn with each of the lines to determine 3 control points.

The limitation of computing dimensions for appropriate pairs for measuring distances between discrete points on the structure is found on page 28, line 16, where it states the required dimensions are computed from the appropriate points using the algorithm presented above for measuring distances between discrete points. Thus, the language of Claim 14 is essentially identically supported by the original disclosure.

The dependent Claims 15-22 are supported in the same way in the pages of the original disclosure.

Claim 15 has the limitation of the weighted average of directions, and finds support on page 27, line 18.

The step of generating queries into a data set of the reflectance image of Claim 16 is found in page 13, line 22, and figure 3.

Claim 17 and the limitation of selecting a first point step includes the step of selecting the first point on an exterior face near a first edge of the structure in the image as represented by a first pixel on the image, is found on page 26, lines 25-27.

Claim 18 has antecedent support found in page 13, lines 22 and 23, and figure 3.

Claim 19 has antecedent support found on page 27, line 14.

Claim 20 finds antecedent support on page 26, lines 27-29.

Claim 21 finds antecedent support on page 27, line 1.

Claim 22 finds antecedent support on page 27, lines 3-6.

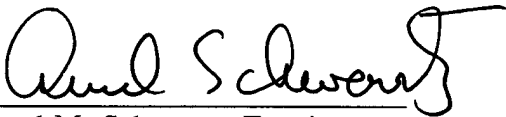
Accordingly, all the claims are well supported by the disclosure.

In regard to the limitations introduced in Claims 1-6 and 8-13, antecedent support is found on page 10, line 3 regarding the 125,000 discrete data points every second provided by the 3D camera.

In view of the foregoing remarks, it is respectfully requested that the outstanding rejections and objections to this application be reconsidered and withdrawn, and Claims 1-6 and 8-22, now in this application be allowed.

Respectfully submitted,

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